

REMARKS

Claims 1-7 are pending in this application. Claim 1 is the only independent claim. By this amendment, claim 1 is amended for clarity.

Reconsideration in view of the above amendments and following remarks is respectfully solicited.

Applicant respectfully requests entry of the present Amendment After Final in that the amendment to claim 1 merely clarifies the invention in an effort to overcome the Examiner's rejection under 35 U.S.C. § 112, 2nd paragraph. Accordingly, entry of the claim amendments and allowance of each of claims 1-7 is earnestly solicited in connection with the present application.

The Claims Satisfy The Requirements Of
35 U.S.C. §112, 2nd Paragraph

The Office Action rejects claims 1-7 under 35 U.S.C. §112, 2nd paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is respectfully traversed.

Applicants respectfully submit that the amendment to claim 1 clarifies the subject matter that applicants regard as the invention.

Specifically, the Examiner alleges that in claim 1:

(a) It is not clear what the relevance of the data storing means is with respect to other elements and how the data stored in the data storing means is used. The Examiner also alleges that every computing device has some kind of data storing means. (see final office Action, page 2, section 3(a)).

In response to the above allegations, applicants respectfully point out to the Examiner that the data packet from the branching unit (28) of the input/output control unit (11) is inputted

to a data memory interface unit (15), for example. The data driven information processor executes an operation based on command information in the data packet or reads/writes data from/to the data memory (16). Contents of the data field of the data packet are also stored in the data memory. The data memory information in the destination field of the data packet is information used to specify an address in the data memory.

(b) The Examiner further alleges that it is not clear what is the relevance of the packet generating means and how the packet generated is used. (see final office Action, page 2, section 3(b)).

In response to the above allegation, applicants respectfully point out to the Examiner that the present invention discloses a data driven information processor that performs image processing and arithmetic processing on data. Processing is performed on data in the form of data packets generated by a packet generation unit (17), for example. An operation of each data is executed and the data driven information processor processes instructions on each data. The processing begins with the data packet that contains a destination field, a command field and a data field written by a destination/data setting unit in the packet generation unit (34). The destination field stores data memory information and node information, and the data field stores operand data (contents of the data field). Again, the data memory information in the destination field of the data packet is information used to specify an address in a data memory. The node information is information used to specify an address when a data flow program is read. The destination field of the data packet determines to which merging unit (23, 27) via a branching unit to send the data packet in the input/output control unit. Additionally, the destination field of the data packet determines if the branching unit sends the data packet from the arithmetic processing unit to an internal buffer unit (25) or merging unit (27). The data packet from the branching unit (28) is inputted to the data memory interface unit that reads/writes data from/to the data memory based on the command information in the data packet. Contents of the data field of the data packet are stored in the data memory.

(c) The Examiner also alleges that the function of the arithmetic processing unit appears to be inconsistent with the operation of elements in Fig. 1 and is confusing with the function of the input/output control unit. (see final office Action, page 2, section 3(c)).

In response to the above allegation, applicants respectfully point out to the Examiner that the data packets from the data memory interface unit (15), the arithmetic processing unit (14), and the data packet generation unit (17) are sent and processed in the input/output control unit (11), for example. The input/output control unit (11) merges data packets and sends the data packets via a branching unit to another merging unit, data memory interface unit, and/or outside the data driven information processor, depending on information in the destination field of the data packet (see page 11 paragraph [0039] of the specification). The arithmetic processing unit executes an operation on the data packet based on command information written in the data packet inputted from a pair data detection unit (13). The arithmetic processing unit (14) also performs information processing based on the data packet inputted from outside the data driven information processor and a data flow program stored in the program storage unit (12). The operation result from the arithmetic processing is written to the data field in the data packet.

(d) Finally, the Examiner alleges that it is not clear what is the ultimate output of the processor. (see final office Action, page 2, section 3(d)).

In response to the above allegation, applicants respectfully point out that the data driven information processor processes data in the form of data packets generated by a packet generation unit (17). The data packet in the data driven information processor is either inputted to the data memory interface unit, program storage unit, or outputted outside the data driven information processor according to the destination field in the data packet.

Furthermore, in contrast with the present invention, when a conventional data driven information processor processes original picture data having been already stored in its data

memory, a problem arises wherein the data cannot be processed or the data processing rate becomes unreasonably low in the case where an input frequency of a data packet from the outside is too fast or too slow, because processing is performed based on an externally inputted clock. However, the present invention is provided with an oscillating means in a packet generating means which can process data using another rate other than the inputted clock frequency in order to process data at an optimal rate.

In response to our previous arguments that the cited reference fail to teach a data storing means and packet generating means, the Examiner asserts that the claims do not recite how those means are relevant in the operation of the processor and how they interact with other elements. (see final office Action, page 2, section 4).

Applicants respectfully submit that the amendment to claim 1 clarifies how the storing means and packet generating means, *inter alia*, are relevant in the claimed invention.

Furthermore, in view of the above amendment to claim 1, applicants respectfully point out to the Examiner that an apparatus must be distinguished from the prior art in terms of structure rather than function, as in accordance with M.P.E.P. § 2114.

Accordingly, applicants respectfully submit that the cited art fail to disclose or teach the claimed elements of "a data storing means for storing data that is read or written by the data driven information processor," "a packet generating means that includes an oscillating means for generating a packet at an oscillation rate of the oscillating means," and "an arithmetic processing means for performing arithmetic processing on the data stored in the data storing means according to command information written in the packet." Therefore, the present application should be allowed.

Applicants respectfully submit that the amendment to claim 1 obviates the rejection of claims 1-7 under 35 U.S.C. §112, 2nd paragraph.

Accordingly, withdrawal of the rejection of claims 1-7 under 35 U.S.C. §112, 2nd paragraph is respectfully requested.

Conclusion

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact Carolyn T. Baumgardner (Reg. No. 41,345) at (703) 205-8000 **to schedule a Personal Interview.**

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment from or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17; particularly, the extension of time fees.

Respectfully submitted,
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